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RESPONSE

1. New Claims

Applicants provide new claims 18-34 which more clearly recite the subject matter of the present invention. Applicants note that original claims 1-17 were translated from the German priority document and drafted generally in European claiming format. Applicants maintain that the new claims merely make explicit that which was implicit in the claims are originally submitted. Acceptance of claims 18-34 is respectfully requested.

2. Rejection of claims 1-17 under 35 U.S.C. § 112, second paragraph

Applicants submit that new claims 18-34 comply with U.S. claim formalities and are in condition for allowance. The claims have been amended to eliminate the terms which are alleged to render the claims indefinite. As a result, Applicants respectfully request removal of this rejection.

3. Rejection of claims 1-2, 4-6, and 9-17 under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent 5,388,862 (Edwards)

Claims 1-2, 4-6, and 9-17 stand rejected as being unpatentable over Edwards. Applicants traverse this rejection. For the reasons put forth below, Applicants respectfully assert that claims 18 and 29 are presently patentable over Edwards. Claims 19, 21-23 and 26-34, which directly or indirectly depend from claim 18, are also patentable on the basis of their dependency from claim 18 and their individual structural elements.

a. <u>Invention Distinguished</u>

The present invention relates to a security paper having a <u>surface coating</u> disposed on at least one surface of the security paper. The coating comprises a

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composition containing a binder. The composition is noted for <u>lacking a filler substance</u> and <u>polyurethane</u>.

b. References Distinguished

Although Edwards discloses a security article, the claimed invention in Edwards is distinctly different from the present invention on the basis of several important particulars.

First, it appears that the Examiner confuses the security paper of the present invention with the security element in Edwards. Generally, Edwards is related to coating a security element embedded in a security article. Edwards describes the security article as being a security paper and an elongate security element which is either wholly embedded within the paper or is partially embedded within the paper with portions thereof being exposed at the surface of the paper at spaced intervals along the security element (col. 2, lines 31-36). Therefore, Edwards clearly distinguishes the security element from the security paper.

In the Office Action, the Examiner fails to make the distinction between the security paper and the security element of Edwards. In one instance, the Examiner indicates that Edwards discloses that the security paper has a light transmitting coating bonded to a second coating in order to bond the security element into paper. Upon a careful reading of col. 3, lines 4-9 (cited by the Examiner), Edwards describes coating the security element so that it bonds to the security paper. This reference by the Examiner does not disclose coating the security paper itself. Upon a review of the disclosure in Edwards, all of Examples 1-9 provided in Edwards relate to coating or preparing the security element. In fact, nowhere is there a disclosure or suggestion in Edwards of actually coating the security paper itself as in the present invention. Accordingly, Edwards fails to teach or suggest all of the limitations of claim 18.

It should be pointed out that a coating for a security element incorporated into a security paper does not require the same properties as a coating for the security

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paper itself. Namely, a coating for security paper requires optimal properties relating to sound, color and fitness for circulation. Such inherent properties of a coating for a security paper are not required for a security element, especially if the security paper having a security element has a coating with the above-described properties. Simply using the coating of the security element of Edwards cannot be extended to the security paper as a whole and further it cannot be expected to yield the same result as in the present invention. Instead, the security elements have coatings which have tailored light transmitting properties and/or provide chemical and mechanical protection (col. 3, lines 13-19; col. 4, lines 54-59).

In the Official Action, the Examiner indicates that Edwards discloses a security paper having a thread. It should be noted that the thread mentioned by the Examiner is the security element (col. 5, lines 42-47). Since the thread is described as being the security element which in turn is described as having a coating, the thread of Edwards cannot possibly be confused as the security paper recited in the present invention.

Since Edwards fails to disclose or suggest a security paper having a coating with a surface coating disposed on at least one surface of the security paper and lacking a filler substance and polyurethane, it is respectfully submitted that Edwards does not disclose or suggest the basic claimed invention of the present invention. Accordingly, removal of this rejection is requested.

4. Rejection of claim 3 under 35 U.S.C § 103(a) as being unpatentable over U.S. Patent 5,388,862 (Edwards) and further in view of U.S. Patent 5,868,902 (Howland et al.)

Claim 3 stands rejected as being unpatentable over Edwards in view of Howland et al. Applicants traverse this rejection. For the reasons put forth below, Applicants respectfully assert that claim 20, corresponding to original claim 3 and directly dependent upon claim 18, is presently patentable over Edwards and Howland et al. on the basis of its dependency from claim 18 and its individual elements.

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Howland et al. fail to make up for the above-noted shortcomings of Edwards. Specifically, Howland et al. disclose applying a coating to a security paper comprising an unpigmented polyurethane (col. 2, lines 17-31). Howland et al. is in direct contradistinction to the present invention wherein claims 18 and 29 of the present invention specifically recite that the composition of the coating is noted for lacking a filler substance and polyurethane. The Examiner states that Howland et al. disclose a coating wherein the binder comprises an acrylated material in Example A of Howland et al. (col. 9, lines 56-62). Surprisingly, the Examiner failed to notice that the coating in Example A specifically includes polyurethane (col. 9, lines 14-16) as a base ingredient. It should be further noted that throughout Howland et al. polyurethane is used in the coating.

Regarding the advantages of the present invention over the prior art, the security paper of the present invention includes a coating without polyurethane and possessing specific desirable properties. The coating is processed so as to protect the security paper and therefore extend its circulation life. Essential to the properties of the coating is that the coating does not alter the printability, sound and color of the present invention (see specification: page 1, lines 7 to 5 from the bottom).

In the present invention, the coating is formed from a composition containing only a binder. It should be stressed that the <u>composition does not include any fillers or polyurethane</u>. It has been found that a binder composition without fillers has superior wetting properties and forms a complete surface film over the fibers of a security paper (see specification: page 2, first paragraph).

Surface coatings based on polyurethane are not satisfactory for use in regards to printing properties and surface hardness of security articles. Furthermore, coatings based on polyurethane require large amounts of solvent. In the present invention, the addition of polyurethane was avoided so that the composition of the coating excluded both fillers and polyurethane. The composition of the present invention provides for

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improved printed properties and contains substantially less solvent so that its processing has a lower environmental impact.

In view of the above-mentioned observations, it is respectfully submitted that Edwards and Howland et al., whether considered collectively or independently, do not disclose or suggest the basic claimed invention of claim 18. Accordingly, claim 20 is patentable on its dependency from claim 18. Withdrawal of the rejection is respectfully requested.

5. Rejection of claim 7 under 35 U.S.C § 103(a) as being unpatentable over U.S.

Patent 5,388,862 (Edwards) and further in view of U.S. Patent 5,161,829

(Detrick et al.)

Claim 7 stands rejected as being unpatentable over Edwards in view of Detrick et al. Applicants traverse this rejection. For the reasons put forth below, Applicants respectfully assert that claim 24, corresponding to original claim 7 and directly dependent upon claim 18, is presently patentable over Edwards and Detrick et al. on the basis of its dependency from claim 18 and its individual elements.

Detrick et al. fail to make up for the shortcomings of Edwards, namely Detrick et al. do not disclose or suggest a security paper having a coating having a surface coating disposed on at least one surface of the security paper wherein the coating comprises a composition containing a binder lacks a filler substance and polyurethane.

Accordingly, Edwards and Detrick et al., whether considered collectively or independently, fail to disclose or suggest the basic claimed invention of claim 18. Claim 24, directly dependent from claim 18, is therefore patentable based on its dependency from claim 18. Accordingly, withdrawal of the rejection is respectfully requested.

6. Rejection of claim 8 under 35 U.S.C § 103(a) as being unpatentable over U.S.

Patent 5,388,862 (Edwards) and further in view of U.S. Patent 6,023,239

((Howland et al. II)

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Claim 8 stands rejected as being unpatentable over Edwards in view of Howland et al. II. Applicants traverse this rejection. For the reasons put forth below, Applicants respectfully assert that claim 25, corresponding to original claim 8 and directly dependent upon claim 18, is presently patentable over Edwards and Howland et al. II. on the basis of its dependency from claim 18 and its individual elements.

Howland et al. Il fail to make up for the shortcomings of Edwards, namely Howland et al. Il do not disclose or suggest a security paper having a coating having a surface coating disposed on at least one surface of the security paper wherein the coating comprises a composition containing a binder lacks a filler substance and polyurethane.

Accordingly, Edwards and Howland et al. II, whether considered collectively or independently, fail to disclose or suggest the basic claimed invention of claim 18. Claim 25, directly dependent from claim 18, is therefore patentable based on its dependency from claim 18. Accordingly, withdrawal of the rejection is respectfully requested.

7. Conclusion

In view of new claims 18-34, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that claims 18-34 be allowed and the application be passed to issue.

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If any issues remain that may be resolved by a telephone or facsimile communication with the Applicants' Attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

Respectfully submitted,

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